### A STRUCTURED APPROACH TO DESIGNING DASHBOARDS

Tim Dibble, The Justice Management Institute Hon. Craig Pfeifle, 7<sup>th</sup> Judicial Circuit, South Dakota Bill Poppenga, Uniform Judicial System, South Dakota Ian Jantz, Ph.D., Illinois Circuit Court of Cook County

12:45 pm, Thursday, October 18



#### Agenda

- Introduction of Panelists and their Work (5 mins)
- Dashboard Typologies (15 mins)
- Building a Dashboard (45 mins)
- Questions (10 mins)



## 7<sup>th</sup> Judicial Circuit Dashboard

#### 1.0 Cases

Active Pending Cases -	1.1	Pending Inventory
adjudicating active felony cases is the core of what we do		Age of Active Pending Cases
<b>Disposed Cases</b> - assessing our work on completed cases helps us manage our active cases	1.3	Clearance Rate - Filings & Dispositions
	1.4	<b>Detail Filings &amp; Dispositions</b>
	1.5	Time to Disposition



## 7<sup>th</sup> Judicial Circuit Dashboard

#### Hon. Robert Gusinsky -• **Age of Active Pending Cases** 1-Jul-2018 Pending 61-90 91-180 181-240 31-60 241+ Percent 0-30 **Criminal Cases** Track Backlog Start Days Days Days Days Days Days Track 1 Simple - Felony 5 and 6 - 90 days 726 363 218 109 36 5% \_ Track 2 Standard - Felony 3 and 4 - 180 days 358 107 89 72 10% 54 18 18 Track 3 Complex - Felony 1 and 2 and Homicide - 180 days 5% 273 109 82 55 8 5 14 Track 4 Post-Judgment/Reopened Cases - 180 days 7 5% 134 34 3 47 40 4 Track 5 Specialty dockets and programs - no time standard 50 10 10 10 10 10 \_ Total Cases 1,541 637 439 279 120 40 26 NA



## **Judicial Dashboard Template**

- 1.0 Cases
- 2.0 Pretrial Decisions
- 3.0 Hearings and Events
- 4.0 Sanctions
- 5.0 Outcomes and Causes



## **Cook County Model Bond Court Dashboard**

http://www.cookcountycourt.org/HOME/ModelBondCourtInitiative.aspx

Measure 1. Cook County Jail Population Trends – monthly avg + snapshot Measure 2. Initial Bond Orders set for felony defendants with a Public Safety Assessment Measure 3. Deposit bond amount needed to secure initial release from custody Measure 3. Dollar amount needed to post for deposit bonds Measure 4. Rate of pretrial release by initial bond order Measure 5. Court Appearance Rate – defendants on pretrial release at all hearings Measure 6. Community Safety Rate – defendants on pretrial release no new charges filed Measure 7. Risk for New Violent Criminal Activity – elevated risk + new charges



### **Cook County Model Bond Court Dashboard**



#### CIRCUIT COURT OF COOK COUNTY MODEL BOND COURT DASHBOARD

#### Performance Period : April - June 2018

This dashboard presents seven key performance measures being used to monitor implementation of the Model Bond Court initiative in the Circuit Court of Cook County.

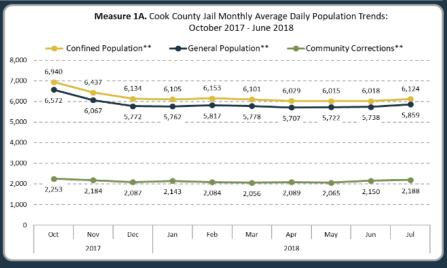
#### MEASURE 1. COOK COUNTY JAIL POPULATION TRENDS

Measure 1A shows the Cook County Jail's monthly average daily population trends postimplementation of General Order 18.8A (Effective September 18, 2017).

- General Population From October 2017 to June 2018, the General Population decreased 12.7%.
- Confined Population From October 2017 to June 2018, the Confined Population also decreased 13.3%.
- Community Corrections Population (Sheriff's Electronic Monitoring) From October 2017 to June 2018, the Community Corrections Population decreased 4.6%.

#### Reduction in Jail Population Pre-Implementation of General Order 18.8A

 From July 2015 (implementation of the Public Safety Assessment in Central Bond Court) to October 2017 (first full month post-implementation of G.O. 18.8A) the monthly ADP of the general population decreased by 16% (from 7,822 to 6,572).



Average Daily Population "ADP" calculations generated by the Office of the Office of the Office of the Office of the Office (OCI) Information Services Department using "Sheriff's Daily Report" (October 2017 – June 2018). The daily reports are provided to the OCI by the Cook County Sheriff's Office Bureau of Information and Technology Business Intelligence Unit. The Sheriff's Daily Report does not provide subcategory breakdown of the inmate population (e.g., pre-trial detainees, sentenced individuals, charged with felony or misdemeanor, etc.). The monthy ADP calculation totals the number of inmates on each day of the month being measured divided by the number of days in the month.

\* The Confined Population consists of the male and female divisional population, Hospital, VRIC, Pre-Release Treatment Programs, and Residential Treatment programs, as well as the off-site population confined in jails outside of Cook County. The general population consists of the male and female division population on site at CCDOC. The Community Corrections Population includes Sheriff's Electronic Monitoring and VRIC post-release.



Supported by the John D. and Catherine T. MacArthur Foundation

- 3

# DASHBOARD TYPOLOGIES



## **Dashboard Definition**

A **data dashboard** is an information management tool that visually tracks, analyzes and displays key performance indicators, metrics and data points to monitor and analyze the health of an organization and its performance.

Adapted from Klipfolio



### **Types of Dashboards**

- Statistical counting stuff, data
- Performance measuring outcomes
- Decision-making merging data and performance

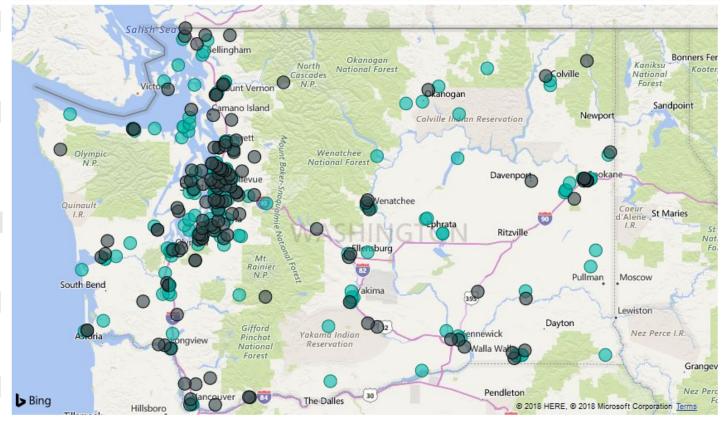


#### **Types of Dashboards**

nome - Grine in the 0.3 2010 - Grine	in nie 0.5. 2010 -	iavics - iav	ile o Frable o State	Guis - Arkansa	15						
US. DEPARTMENT OF JUSTICE • FEDERAL BUREAU OF INVESTIGATION • CRIMINAL JUSTICE INFORMATION SERVICES DIVISION											
Criminal Justice Information Se	Criminal Justice Information Services Division Feedback   Contact Us   Data Quality Guidelines   UCR Home						me				
Home Offenses Known to La	aw Enforcement	<u>Violent</u>	t Crime Prope	erty Crime	<u>Clearances</u>	Persons	Arrested P	olice Emplo	<u>yee Data</u>		
Offenses Known to Law I by Metropolitan and Non [The data shown in this tabl department.] Data Declaration Download	imetropolitan le do not reflec		totals but are t	he number (	of offenses r	eported b	y the sheriffs	s office or (	county pol	ice	
Metropolitan/Nonmetropolitan	County	Violent crime	Murder and nonnegligent manslaughter	Rape (revised definition) <sup>1</sup>	Rape (legacy definition) <sup>2</sup>	Robbery	Aggravated assault	Property crime	Burglary	Larceny- theft	Mot vehi the
Metropolitan Counties	Benton	95	2	26		2	65	663	328	300	35
	Cleveland	10	0	2			7				

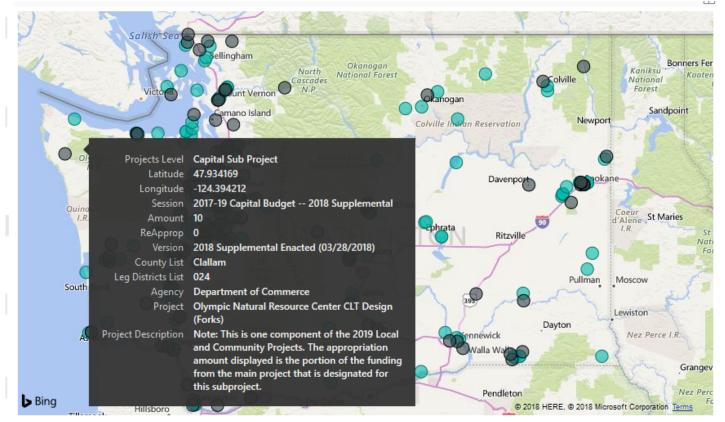


#### **Types of Dashboards – Washington State Capital Budgets**





#### **Types of Dashboards – Washington State Capital Budgets**



Capital 
Capital Sub Project



#### **Types of Dashboards**

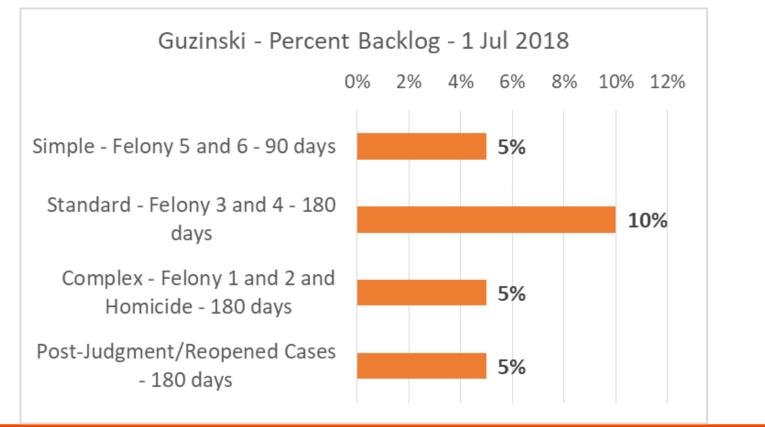
**SAFETY+JUSTICE** CHALLENGE

町

#### Michigan Supreme Court Judiciary Dashboard

WHY IT MATTERS >>		
	2014	2015
Population With One or More Problem-Solving Courts	97%	98%
	Comparison Group	Graduates
Sobriety court 2-year, drug/alcohol conviction		Graduates 3%
Sobriety court 2-year, drug/alcohol conviction Sobriety court 2-year, any new conviction	Group	

## 7<sup>th</sup> Judicial Circuit Dashboard





## **Cook County, Bond Court Dashboard**



CIRCUIT COURT OF COOK COUNTY MODEL BOND COURT DASHBOARD

Performance Period : April - June 2018

🎾 This dashboard presents seven key performance measures being used to monitor implementation of the Model Bond Court initiative in the Circuit Court of Cook County.

#### MEASURE 1. COOK COUNTY JAIL POPULATION TRENDS

Measure 1A shows the Cook County Jail's monthly average daily population trends postimplementation of General Order 18.8A (Effective September 18, 2017).

- General Population From October 2017 to June 2018, the General Population decreased 12.7%.
- Confined Population From October 2017 to June 2018, the Confined Population also decreased 13.3%.
- Community Corrections Population (Sheriff's Electronic Monitoring) From October 2017 to June 2018, the Community Corrections Population decreased 4.6%.

#### Reduction in Jail Population Pre-Implementation of General Order 18.8A

 From July 2015 (implementation of the Public Safety Assessment in Central Bond Court) to October 2017 (first full month post-implementation of G.O. 18.8A) the monthly ADP of the general population decreased by 16% (from 7,822 to 6,572).

Measure 1A. Cook County Jail Monthly Average Daily Population Trends: October 2017 - June 2018 Confined Population\*\* ——General Population\*\* ——Community Corrections\*\* 8.000 6.940 7.000 6 437 --6.134 6.153 6 105 6.101 6,124 6.029 6,015 6.018 6,572 6.000 6.067 5,817 5.859 5,772 5,762 5,778 5,707 5,722 5,738 5,000 4 000 3.000 2.000 2,253 2,184 2.188 2,087 2,143 2,084 2,056 2,089 2,065 2.150 1,000 0 Oct Nov Dec Jan Feb Mar Apr May Jul Jun 2017 2018

Average Daily Population \*ADP\* calculations generated by the Office of the Chief Judge (OCJ) Information Services Department using "Sheriff's Daily Report" (October 2017 – June 2018). The daily reports are provided to the OCI by the Cook County Sheriff's Office Bureau of Information and Technology Business Intelligence Unit. The Sheriff's Daily Report does not provide subcategory breakdown of the inmate population (e.g., pre-trial detainees, sentenced individuals, charged with felony or misdemeanor, etc.). The monthly ADP calculation to tals the number of inmates on each day of the month being measured divided by the number of the.

\* The Confined Population consists of the male and female divisional population, Hospital, VRIC, Pre-Release Treatment Programs, and Residential Treatment programs, as well as the off-site population confined in jails outside of Cook County. The general population consists of the male and female division population on site at CCDOC. The Community Corrections Population includes Sheriff's Electronic Monitoring and VRIC post-release.



## **BUILDING A DASHBOARD**

- 1. Define goals and objectives audience and buy-in
- 2. Build capacity terminology, information, performance measures
- 3. Start small and simple
- 4. Making the dashboard an effective tool



## **1. Define goals and objectives**

- Map out larger system goals and objectives at a high level
- Define the audience
- Get buy-in from decision makers



## **1. Define goals and objectives**

#### **Seventh Judicial Circuit** Unified Judicial System of South Dakota

### **Felony Cases**

Differentiated Case Management Plan – Pennington County March 8, 2017, v6



## **1. Define goals and objectives**

#### GENERAL ORDER NO. 18.8A Procedures for Bail Hearings and Pretrial Release

This order is intended to ensure no defendant is held in custody prior to trial solely because the defendant cannot afford to post bail, to ensure fairness and the elimination of unjustifiable delay in the administration of justice, to facilitate the just determination of every criminal proceeding, and to preserve the public welfare and secure the fundamental human rights of individuals with interests in criminal court cases.



#### 2. Build capacity

- Terminology
- Performance measures
- Information



### 2. Build capacity – terminology 7<sup>th</sup> Circuit

Track	Case-types or highest charge types	Expected case duration and notes
Felony Track 1	Felony class 5 Felony class 6	These are mostly presumptive probation cases. These cases should be assigned a trial date which is 120 days following the defendant's first appearance in Circuit Court. Cases on this track have a dispositional goal of 60 days following the defendant's first appearance.
Felony Track 2	Felony class 3 Felony class 4	These cases should be assigned a trial date which is 150 days following the defendant's first appearance in Circuit Court. Cases on this track have a dispositional goal of 100 days following the defendant's first appearance.
Felony Track 3	Homicide Felony class 1 Felony class 2 Complex felony cases	Other felony class cases may be reassigned to Track 3. Before or at the first appearance in Circuit Court, cases will be assigned a trial date no more than 180 days in the future. Cases on this track have a dispositional goal of 125 days following the defendant's first appearance.



#### 2. Build capacity – terminology and information



# **CSPJU** Court Statistics Project State Court Guide to Statistical Reporting

Version 2.1.2 Updated March 20, 2017



Track	Case-types or highest charge types	Expected case duration and notes
Felony Track 1	Felony class 5 Felony class 6	120 days goal = 60 days
Felony Track 2	Felony class 3 Felony class 4	150 days goal = 100 days
Felony Track 3	Homicide Felony class 1 Felony class 2 Complex felony cases	180 days goal = 125 days



### 2. Build capacity – terminology and information

The **Confined Population** consists of the male and female divisional population, Hospital, VRIC, Pre-Release Treatment Programs, and Residential Treatment programs, as well as the off-site population confined in jails outside of Cook County.

The **general population** consists of the male and female division population on site at CCDOC. The Community Corrections Population includes Sheriff's Electronic Monitoring and VRIC post-release.



#### 2. Build capacity – terminology and information



CIRCUIT COURT OF COOK COUNTY MODEL BOND COURT DASHBOARD

<u>Performance Period</u> : April - June 2018

🐐 This dashboard presents seven key performance measures being used to monitor implementation of the Model Bond Court initiative in the Circuit Court of Cook County.

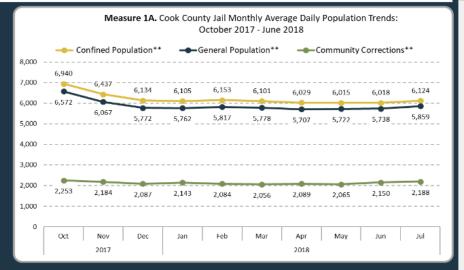
#### MEASURE 1. COOK COUNTY JAIL POPULATION TRENDS

Measure 1A shows the Cook County Jail's monthly average daily population trends postimplementation of General Order 18.8A (Effective September 18, 2017).

- General Population From October 2017 to June 2018, the General Population decreased 12.7%.
- Confined Population From October 2017 to June 2018, the Confined Population also decreased 13.3%.
- Community Corrections Population (Sheriff's Electronic Monitoring) From October 2017 to June 2018, the Community Corrections Population decreased 4.6%.

#### Reduction in Jail Population Pre-Implementation of General Order 18.8A

 From July 2015 (implementation of the Public Safety Assessment in Central Bond Court) to October 2017 (first full month post-implementation of G.O. 18.8A) the monthly ADP of the general population decreased by 16% (from 7,822 to 6,572).



Average Daily Population \*ADP\* calculations generated by the Office of the Chief Judge (OCJ) Information Services Department using "Sheriff's Daily Report" (October 2017 – June 2018). The daily reports are provided to the OCI by the Cook County Sheriff's Office Bureau of Information and Technology Business Intelligence Unit. The Sheriff's Daily Report does not provide subcategory breakdown of the inmate population (e.g., pre-trial detainees, sentenced individuals, charged with felony or misdemeanor, etc.). The monthly ADP calculation to tals the number of inmates on each day of the month being measured divided by the number of the.

\* The Confined Population consists of the male and female divisional population, Hospital, VRIC, Pre-Release Treatment Programs, and Residential Treatment programs, as well as the off-site population confined in jails outside of Cook County. The general population consists of the male and female division population on site at CCDOC. The Community Corrections Population includes Sheriff's Electronic Monitoring and VRIC post-release.



#### **Reduction in Jail Population Pre-Implementation of General** Order 18.8A

From July 2015 (implementation of the Public Safety Assessment in Central Bond Court) to October 2017 (first full month postimplementation of G.O. 18.8A) the monthly ADP of the general population decreased by 16% (from 7,822 to 6,572).







National Disproportionate Minority Contact Databook Home View trends | Printer-friendly | Download What is an RRI? Year Offense Show Table 2016 ~ All delinguency offenses ~ Constructing an RRI Matrix Display values as: Counts | Rates | RELATIVE RATES (RRI) National RRIs by race/ethnicity by gender and 2016 Case Processing Summary: by race/ethnicity race/ethnicity Relative Rate Indices<sup>1</sup> for Delinquency Offenses by gender DMC Data Sources **RELATIVE RATES** Minority \$ Black \$ AIAN\*\* \$ AHPI\*\*\* **♦** Hispanic \$ \* Referral rate 1.56 3.03 0.23 0.98 trends 1.16 Statistical trends Diversion rate 0.69 0.62 0.88 0.92 0.80 trends Detention rate 1.43 1.41 1.27 1.26 1.51 trends Petitioned rate 1.17 1.22 1.07 1.05 1.08 Adjudicated rate 0.97 0.92 1.15 0.98 1.06 trends 0.95 0.99 0.95 Probation rate 0.95 1.09 trends 1.35 1.07 1.04 1.52 Placement rate 1.39 trends \*0.55 1.34 1.57 1.47 0.85 trends Waiver rate

Office of Juvenile Justice

and Delinguency Prevention

Enhancing safety. Ensuring accountability. Empowering youth.



#### 3. Start small and simple

- Small
- Simple



#### 3. Start small and simple

#### 1. Cases

- 2. Pretrial decisions
- 3. Hearings and events
- 4. Sanctions
- 5. Outcomes and causes



#### 3. Start small and simple

- 1. Build simple graphs and data in Excel, before going to the developers.
- 2. Test your data using simple extracts.



#### 4. Making the dashboard an effective tool

- Accuracy and reliability quality control
- Regular reporting
- Accountability structural mechanisms



#### 4. Making the dashboard an effective tool

### Data Dashboards

2018 Q2 Model Bond Court Dashboard 2018 Q1 Model Bond Court Dashboard 2017 Q4 Model Bond Court Dashboard

٦Г

2018-Q2 At-A-Glance



#### 4. Making the dashboard an effective tool

- Web-based internal dashboard / public Internet
- PDF; downloadable Excel data; data tables; graphs; interactive....many solutions



# Questions? Thank you!



SafetyAndJusticeChallenge.org